

▲ Building Competency in the Novice Allied Health Professional through Peer Coaching

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The development of competence is an ongoing journey, and one that is particularly punctuated in the early part of a health professional's career. These novice practitioners need to recognize that the challenges inherent in building competency might be resolved more readily by engaging with peers. This paper outlines what it means to be a novice practitioner, and how peer coaching can be used to support professional development in the allied health sciences. An overview of the reasoning process and how peer coaching and experiential learning can be used to build competence is described. A structured and formal approach to peer coaching is outlined in this paper. Novices who embrace this professional development strategy will find the model of coaching practice and underlying strategies described in this paper beneficial to their experience. The importance of formalizing the process and the underlying communication skills needed for coaching are described in detail with accompanying examples to illustrate the model in practice. *J Allied Health* 2010; 39:e77– e82.

THE CHALLENGE FOR HEALTH SCIENCE students and new graduates, when entering clinical practice, is to transfer their knowledge and practice from the academic environment to the clinical environment. While it is important that novices demonstrate their competence to practice at an individual level, the journey towards achieving competence should not be attempted in isolation. Learning is a social process and there is much greater interest in formative assessment and learning practices in higher education which are constructivist in nature and provide a more productive solution for meeting the needs of students.¹ We build our competence by seeking feedback from 'others' about our knowledge, skills and attitudes towards professional practice. These 'others' don't just have to be clinical supervisors, fieldwork educators or your boss, they can and should also involve peers. Peer

involvement can be a powerful formative learning experience as partners can support one another in building applied practice standards to their own work.²

In clinical practice, collegial networks are an important strategy to promote transfer of training.³ Transfer of training refers to the ability to take formal knowledge, acquired through training, and apply it to regular practice. Novices who think they can achieve this transfer on their own are less likely to achieve competency targets in comparison to their peers who engage in learning with peer networks. Whilst it is still possible to get to a level of mastery on your own, one will get there faster and more comprehensively by engaging with others in learning.⁴

The research is very clear that peer learning leads to significant gains in learning,⁵⁻⁸ and peer coaching is one method for facilitating this outcome, which is increasingly being used in allied health education. Peer coaching is one of a suite of peer learning strategies⁹ that can be used to promote learning and professional development. Peer feedback has also been used to describe the communication process that occurs between individuals in the learning environment and is seen as a powerful formative assessment strategy.² Much of the literature in the health sciences on peer coaching has focused on the model, its benefits and challenges¹⁰⁻¹⁵, and outcomes.^{4, 16-21} Few resources have been written specifically for the players in this situation, the novice practitioner, which is the focus of this paper.

Oldmeadow²² provides a taxonomy of competence starting at the novice level and culminating at expert practice. As stated in the previous paragraph, this paper focuses on those professionals in the early stages of emerging competence, namely, the novice and advanced beginner. Applying this taxonomy to this paper, a novice, therefore, can refer to a student about to embark on a clinical placement/internship or a recent health sciences graduate. In the case of discussions concerning peer coaching, the novice may also be referred to as the "coachee" and the peer providing coaching as the "coach".

CLINICAL REASONING IN THE NOVICE PRACTITIONER

An exhaustive overview of clinical reasoning in the novice practitioner is beyond the scope of this paper and this paper will focus on the biomedical aspects of competency. Readers are encouraged to read excellent summaries on this topic in the literature.^{23,24} However, a brief summary is necessary to under-

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stand the relationship between novice and expert clinical reasoning and peer coaching. Research from medicine²⁵, which examines how expertise is developed, denotes the difficulties and challenges novices have in transferring biomedical theory and knowledge into actual practice.²⁴ Errors in reasoning are frequently made at this stage of development as clinical experiences with clients, for example, often do not mirror concepts addressed in theory. Hence, novices must apply cumbersome backward or hypothetico-deductive reasoning strategies to inform their action.²⁶ These backward reasoning approaches require novices to develop hypotheses based on their investigations and assessments with clients, and then test each one out in order to come to a decision about their clinical practice strategy and findings. This cognitive load on novices challenges the capacity of their working memory²⁷ and reasoning/decision errors often ensue as a result. These errors, if unnoticed, may get adopted into the ongoing decision making and practice of the novice, and reduce practice efficacy.

For example, most physiotherapy students will not perform their first shoulder assessment and treatment flawlessly. Applying a backward reasoning approach to the scenario of a middle aged man with right shoulder pain, the physiotherapy student would most likely have to investigate the possibility of a range of hypotheses (bicipital tendonitis, rotator cuff tendonitis, sub-acromial bursitis, referred pain from cervical joints, acromio-clavicular joint pain, etc...). The investigation of these hypotheses will also be made more complex depending on the acuity of the patient along with the chronicity of the pain and symptoms. The patient characteristics (demeanour, personality, attitude towards recovery, social circumstances) also add a unique dimension to the assessment and treatment outcomes. With repeated exposures to clients with this pathological condition and similar characteristics, and working through all of these factors repeatedly, a level of competency is achieved. This competency, however, takes time and repeated practice with numerous patients with shoulder pain are necessary.

The development of competency is also a very stressful and anxious time for novices. They fear making mistakes, creating discomfort for the client and wasting the patient's time. Hence, the support of peer coaching can be valuable in overcoming these stressors. While supervisors may provide some of this support, novices often are reluctant to discuss these issues with those in evaluative positions and therefore, internalise these stressors and worries.

WHAT IS PEER COACHING?

Peer coaching was originally developed as a strategy to support the development of teachers²⁸, who often work in isolation in the classroom. Teachers are required to transfer learning from new curriculum developments into actual teaching practice. Peer coaching was devised as a strategy to support teachers to implement these new initiatives effectively into the classroom. Since then, peer coaching has been used in the education of health professionals with evidence to suggest it

has been used effectively in: physicians²⁹; health educators³⁰; nurses^{17, 31}; and physiotherapists.^{4,19}

Waddell and Dunn³¹ define peer coaching as a voluntary and non-evaluative relationship between two practitioners who share similar experience and training and wish to embed knowledge and skill into practice. Peer coaching, therefore, is a planned and systematic approach to build competence and practice. Topping defines peer learning as the acquisition of knowledge and skill through active helping and supporting among status equals⁸ Hence, peer coaching requires the establishment of trust, a shared commitment to learn, the creation of goals and objectives, observation, reflection and non-evaluative feedback. It also requires a set of coaching skills.

Peer coaching is particularly aligned to theories of learning and has a strong evidence base. Learning theory is quite clear that cooperation between peers is strongly linked to cognitive growth.⁸ This stems from the intellectual disagreements that occur when peers discuss issues related to biomedical knowledge and clinical practice. Peers are a compelling source of intellectual conflict because they can discuss biomedical knowledge in a manner that is easily understood by one another^{32,33} and in a non-threatening manner. These conceptual conflicts motivate peers to seek out new information.^{7,34,35} Transfer of learning to practice is facilitated by this socio-cognitive learning approach through the discussions about training and the application to work that takes place during peer coaching.³⁶ Vygotsky argues that the social and cognitive interaction with a more capable peer allows the less capable peer to enter new areas of potential.³⁶

The peer coaching experience can be structured into several components which have been described in the literature^{28,31} These components, which are important for participants in this process to understand, are comprised of: forecasting a need for transfer; training with demonstration of the new practice behaviors; opportunity for practice; non-evaluative feedback and questioning, and; self-assessment.^{28,31} Each one of these components are described in more detail.

Forecasting a Need for Transfer

In forecasting a need for transfer, a physiotherapy novice in a hospital based neurological ward, for example, may recognize that they need support in applying techniques that reduce hypertonicity. They would seek opportunities to implement these skills with a peer coach who would observe their techniques in practice. This would be followed by non-evaluative feedback (discussed later in this paper). Forecasting must be carried out by the coachee based on their on-going self-assessment of their professional practice and competence. The specified area of need that the physiotherapy novice has forecasted for themselves forms the learning objective between the peer coach and coachee. The learning objective, based on forecasting, gets refined and developed throughout the peer coaching engagement and stems from the ongoing process of self-reflection and self-evaluation.³⁷

Once the learning objectives are established, time is set aside to practice the relevant skills both independently and under observation by the peer coach. Where the novice engages in skills independently, they might later discuss their experience with their peer coach. In the case where the peer coach is directly observing the technique, coaching may occur during or immediately after the encounter. If it takes place during the encounter, a strategy is needed whereby information can be provided directly to the coachee without interfering with the clinician-client relationship. For example, the partnership can have a 'signal' that indicates the peer coach would like to provide some non-evaluative feedback to the coachee. When the signal is provided, the coachee asks the coach, "is there is anything you would like to comment on?" It is at this point when the coach may ask the question. For example, if the physiotherapy novice's hand placements are going to increase rather than decrease tone, the peer coach may ask, "what are some alternative hand placements you could adopt to facilitate a reduction in the patient's hypertonicity?" This may be enough to trigger the coachee to realize that their hand placement is incorrect. If they cannot provide an answer, the peer coach may then probe further and provide some cues by stating, "how do you think tone would decrease if you placed your left hand on the top of the patient's foot?" This feedback provides learning in the moment, where it is most powerful, whilst still remaining non-evaluative. This same questioning technique would also be applied after the patient encounter.

Opportunity for Practice

Competence is not achieved in one, two or three patient encounters. A series of encounters, each linked to a specific type of pathology, are needed to build competence to an entry level standard. For example, a novice may be frustrated by their attempts to assess a patient, using all the techniques they learned at University, with an acute rotator cuff tendinitis. They discover that most of the techniques are too painful for the patient to tolerate. A second patient with a sub-acute rotator cuff tendinitis reveals to the novice that some of these techniques become appropriate when pain is less of a problem for the client. A third patient with a chronic rotator cuff tendinitis reveals to the novice that most of the techniques can be applied in clients where stiffness, rather than pain seem to be the main complaint. This repeated exposure to patients with a common diagnosis, but with different manifestations of acuity, helps the novice transform their biomedical knowledge into clinical knowledge. Hence, novices must seek multiple opportunities for practice with patients with similar, yet varying clinical diagnoses, pathology and altered function. Peer coaching becomes extremely valuable during this series of layered learning experiences through the dialogue, discussion and questioning that ensues. This collaborative inquiry provides insights into how biomedical knowledge can be applied to the clinical situation, thus informing practice more deeply.

Non-evaluative Feedback and Questioning

Peer to peer feedback is a powerful source of learning for novices. It is often much more accessible, frequent and situated in a language which assists students to reframe knowledge and meaning through their interactions with one another.³⁸ However, feedback can often become evaluative in nature. Evaluation must not be a focus of the peer coaching relationship otherwise a status difference emerges between the peers. Students in particular, dislike having power over their peers³⁹ and assessing leads to an increase in power by the evaluator.⁴⁰ The peer coach must instead learn to ask questions about what they have observed, and heard and this can be quite challenging for novices.¹ If the peer coach starts to engage in evaluation or confrontational coaching⁴¹ by telling the coachee what they are doing wrong, the coach begins to take the role of the evaluator. This is the role usually taken by the clinical supervisor who must rate the novice's performance on competency based evaluation forms. If the coach adopts this quasi-supervisory role, the coachee is likely to disengage from the peer coaching experience and withhold information and opportunities for learning to avoid being evaluated. This retreat to a hidden or private window for learning is described more fully in the Johari Window⁴², a seminal model for understanding human communication and self-disclosure. The hidden window is one where self-disclosure about practice is kept private. The peer coach, therefore, must learn to support their coachee by remaining non-evaluative and avoid the temptation to demonstrate how much they might know. This approach encourages individuals to move in to the open window, one that fosters self-disclosure.⁴² This support role and movement to the open window occurs by asking open-ended questions, actively listening to what the coachee is saying, paraphrasing, summarizing and discussing potential actions the coachee might consider to improve practice.

There are appropriate question formats for coaching that encourage self-disclosure.⁴³ They are usually preceded by "who", "what", "where", and "how". Using the hypertonicity example discussed earlier, a peer coach would ask the coachee,

- "how do you think that different hand placement influenced the patient's tone?",
- "what did you notice when you applied the technique on the patient's tone?",
- "where did you have difficulties in executing the technique",
- "how could you amend the technique to get a better result?".

The peer coach should avoid "why" questions as it alters the status dynamic between players and often makes the coachee defensive. For example, by asking the coachee "why did you apply the technique that way?", the coachee is put in to a position to defend their actions. Instead, by asking open ended questions, actively listening, and perhaps further probing the coachee about their actions, the novice is assisted in the self-assessment process as they can link their action to their knowledge and make conclusions about how to restructure and build their professional practice. This is the experiential learning process⁴⁴ in action which is facilitated by peer coaching.

Experiential learning is critical for learning and can occur during as well as after action.⁴⁵ There are four components. The first is having the experience, followed by reflecting on the experience, followed by making conclusions about the experience and then applying the learning and beginning the cycle again. The questioning offered by the peer coach assists the novice through what is often a very challenging part of their clinical expertise journey, the movement from a storehouse of biomedical knowledge to more applied clinical knowledge. The questioning assists the coachee to reflect and make conclusions regarding how their 'theory' fits 'practice'. This is the first step towards more inductive or forward reasoning processes in reasoning, which is how more competent practitioners think through problems.

Peer coaching supports the coachee by enabling them to develop rich 'patterns' of practice by looking for repeated experiences to engage in this learning cycle. Rather than trying to find every type of neurological condition during a four or five week placement, for example, it is better to look at the specific area of practice and consider what are the four or five most common types of cases seen. In other words, using our clinical examples discussed earlier, repeated examples of clients with hypertonicity or rotator cuff tendinitis can be found to build competence in managing these clinical pathologies. Repeated exposure to these cases, layered with experiential learning and peer coaching will escalate capacity to practice and entry level competency. The coaching process helps learners to focus their thinking and to spend more time on task¹, factors which will positively influence competence development.

Self-assessment

The peer coach and coachee must be skilled at ongoing self-assessment so that they can forecast appropriate learning needs and recognize when they have achieved their learning targets. For the peer coach, self assessment should be centered around their coaching practice. Self-assessment can be aided by a variety of reflective strategies, one of which is journaling.^{46,47} Reflective journaling allows the novice to make notes of successes, failures and challenges in applying their skills, in particular, in more complex ambiguous situations where theory doesn't necessarily seem to fit practice. These reflections can be reviewed and brought forward during formal peer coaching meetings where individuals discuss progress and practice. From these discussions, specific situations can then be set up between parties for observational coaching and feedback. Given that peer coaches are not always together, as they have their own responsibilities, the formalization of this self-assessment process ensures maximum benefit is embedded into the process.

THE ROLE OF THE CLINICAL SUPERVISOR

Peer coaching does not remove the importance of the clinical supervisor or expert in the learning process. Novices still value feedback from their superiors, often more so than from fellow peers because of their perceived role as experts.¹

Hence, supervisors should also provide observational feedback to the novice to improve performance, particularly from their competent or expert perspective. However, these supervisors carry significant status in these roles and are placed in positions to evaluate performance. Even if these individuals execute the same non-evaluative coaching skills described above, this status difference always remains. Hence, novices are often reluctant to disclose the breadth of their challenges, difficulties and questions to supervisors because of the need to ensure good evaluation outcomes. Peer coaches, if performing in their role appropriately, don't carry this 'evaluation' power and are easier to engage with in terms of a trusting learning relationship. Hurley⁴⁸, has noted that where 'stakes' are lower, and similarity, shared interests and values exist between parties, an increase in trust is more likely. Given the equal status in a peer coaching relationship, and the use of non-evaluative feedback, it follows that the dyad has great potential for deep exploration about their learning because of the trust in the partnership. This creates the psychological safety zone between the coach and coachee that is so integral for learning .

It is also not unusual for the peer coaching partnership to resolve many basic questions about practice between one another. This reduces the amount of time the clinical supervisor needs to spend on these basic questions. The peer coaching team is also more likely to approach the supervisor or manager with difficult questions they have as a pair rather than on their own. This stems from the belief that negative evaluation is less likely, given that both parties cannot resolve the question. This group shift phenomenon⁴⁹ is the result of the greater psychological safety attributed to the strength of being a pair. The pair becomes less risk averse and more likely to approach the supervisor or expert with their questions.

PEER COACHING CHALLENGES

The peer coaching partnership has some potential challenges. Individuals who participate in peer coaching should be aware of these potential challenges and some of the strategies for preventing or managing them.

Personality

To work productively as a peer coaching partnership, each participant must be able to build a relationship based on trust, mutual respect and confidentiality. Some individuals find this difficult to do given their underlying personality structure and would be challenged by this arrangement.¹ According to the five factor model of personality, one would predict that individuals with a higher degree of agreeableness and openness to experience, and a lower level of neuroticism, would be more aligned to embrace peer coaching.⁵⁰ A person's level of adjustment and ability to form trusting relationships is also important⁴⁸. Knowledge of learning style theory and personality theory may also be helpful to understand the interpersonal dynamics of the pair.

Competition

Participants must also give up the need to compete with one another and explore some of their own internal difficulties for sharing or parting with their 'own' knowledge.¹ Reward structures that encourage cooperation, rather than individualism or competitiveness⁵¹ are needed. For example, performance should focus on individual performance and its relationship to required duties and competencies. Comparisons to peers should be avoided as this engenders competition and fails to recognize the uniqueness of every individual's learning journey and pathway to competence. Pass or fail systems in clinical education programs, remove the need for students to compete against one another for marks. These systems are also more appropriate for the assessment of entry level competence. Competition can also be thwarted by rewarding students for peer coaching in the professional behavior category of most evaluation forms. This reward structure would encourage collaboration over competition.

Placement/Rotation Duration

The short term nature of a placement, and the assignment of training venues to novices by the academic program, usually means that individuals don't get to select their learning partner. The short term nature of the experience makes building trust, respect and confidentiality more difficult, but not impossible, particularly if novices embrace the principles of peer coaching. The peer coaching relationship can flourish very quickly when it is built around good communication, non-evaluative feedback, trust, confidentiality and integrity. Hence it is important that the coach and coachee take time to get to know each other, familiarize themselves with forecasted learning needs and make a commitment to the relationship and the learning that will take place. These attributes help to build trust, which is one of the most consistent factors in successful peer coaching relationships.

The participants in the peer coaching must also take time to assess their group's health. Hence, individuals need the ability to communicate assertively when necessary, raise concerns about the group's dynamics and work through working difficulties in a productive manner, as one would expect more senior counterparts to be able to do in the work setting.

CONCLUSION

Novices often report that being alone on a placement can be a very isolating, stressful and anxiety provoking experience. Peer coaching provides an opportunity for partners to overcome some of these stressors through the support that is offered in this learning model. It helps novices to build self-efficacy⁵² and confidence⁵³ and empowers them to be successful. Novices can provide beneficial support and learning to one another if they give up competition and recognize that to learn and build competence is about asking questions and engaging with others. It requires that individuals accept vulnerability as part of the journey towards competence. Novices who familiarize themselves with the principles of peer coach-

ing that are described in this paper will find their experience in this model very fulfilling and central to their ongoing professional development.

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